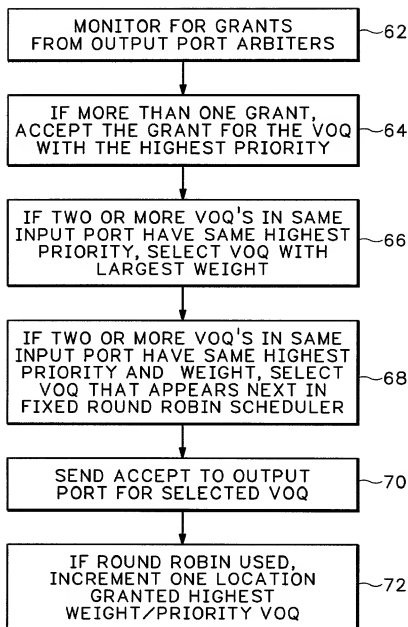
**FIG.3**

**FIG.4**

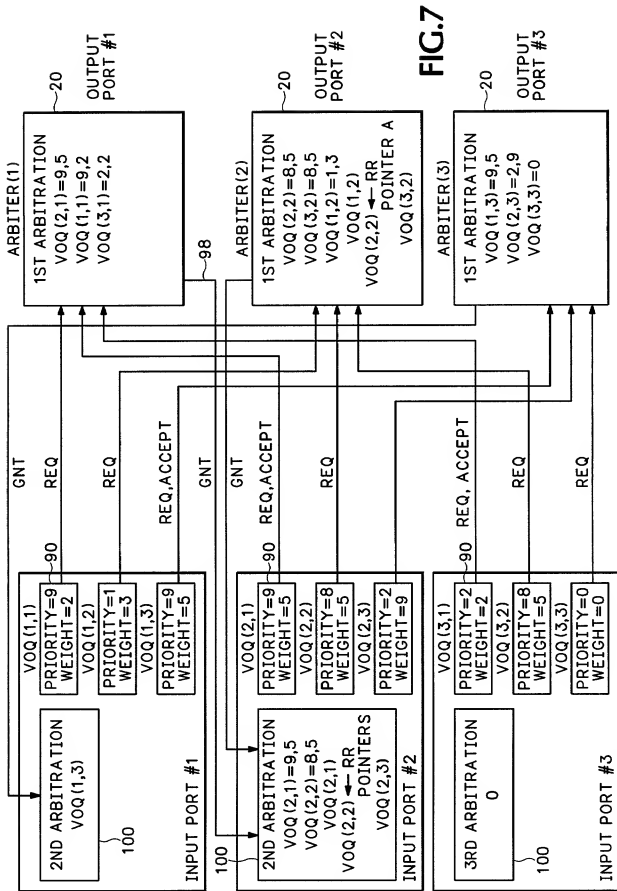


FIG. 7

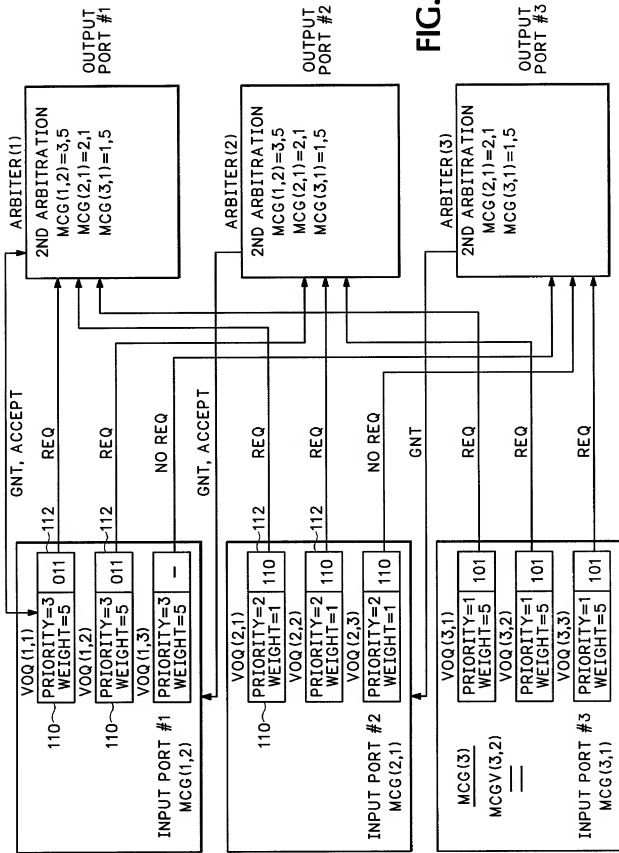


FIG.10

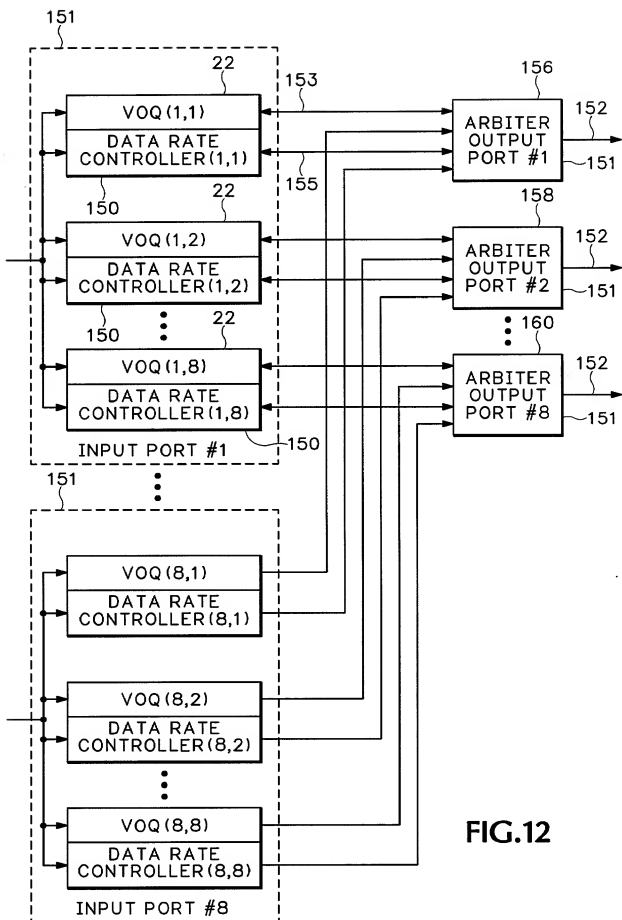


FIG.12

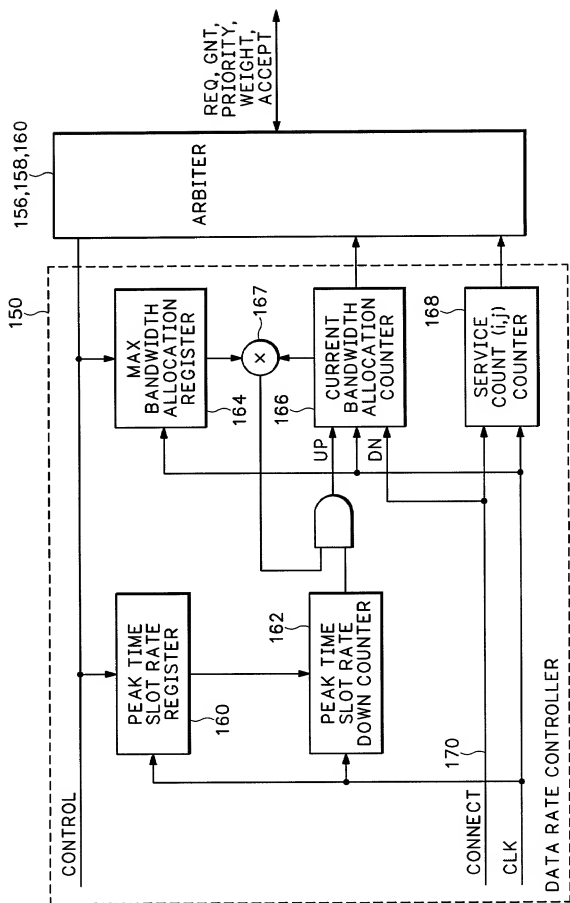


FIG.13

FIG. 14 is a block diagram of a multi-ported switch architecture. The diagram shows multiple input ports (151, 150A, 150) feeding into a central switching fabric. Each input port has a set of VOQs (Virtual Output Queues) and DRCs (Data Rate Controllers). The switching fabric includes arbiters (156, 158, 160) and data rate controllers (172) for each output port. A controller (170) manages the system. The output ports provide cross-switch output connections (26).

The input ports are labeled 151, 150A, and 150. Each input port has a set of VOQs and DRCs. For example, input port 151 has VOQs 1,1 through 1,4 and DRCs 1,1 through 1,4. Input port 150A has VOQs 2,1 through 2,4 and DRCs 2,1 through 2,4. Input port 150 has VOQs 3,1 through 3,4 and DRCs 3,1 through 3,4. The diagram shows a vertical stack of input ports, with an ellipsis indicating more ports. The output ports are labeled 156, 158, 160, and 170. Each output port has an ARBITER and a DATA RATE CONTROLLER. The output ports provide CROSS-SWITCH OUTPUT PORT #1 CONNECTION, CROSS-SWITCH OUTPUT PORT #2 CONNECTION, CROSS-SWITCH OUTPUT PORT #3 CONNECTION, and CROSS-SWITCH OUTPUT PORT (N) CONNECTION. A CONTROLLER (170) is shown at the bottom, connected to the DATA RATE CONTROLLER (N) and the ARBITER (N).

FIG.14